

**Notice of Allowability**

Application No.

09/441,081

Examiner

Thomas M. Ho

Applicant(s)

SATO ET AL.

Art Unit

2134

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 10/28/05.
2. ☒ The allowed claim(s) is/are 1-5, 16 and 28.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

1. *Claims 1-5, 16, 28 are pending.*
2. *Claims 1-5, 16, 28 are allowed.*

*Reasons for Allowance*

In the previous action the Examiner rejected the claimed invention based on the fact that displaying of numbers respectively arranged to a user was well known in the art at the time of invention.

For this matter, the Examiner notes that any display of numbers in a normal sense, would inherently constitute a respective display of digits to a user.

For Example, if the Examiner were to present the number 4712, it is clear that each digit is displayed in respective digit positions in that, the 4 clearly delimits the thousands position, the 7, the hundreds, position, the 1, the tens position, and the 2, the ones position.

Even a trivial display of a single digit would constitute a display of digits in a respective position. For Example, the display of the number 5 would clearly display 5 in its respectively position as quantity of a ones placeholder. Mathematically speaking, those of ordinary skill in the art would recognize "5" to mean:

$$0 * 10^3 + 0 * 10^2 + 0 * 10^1 + 5 * 10^0$$

*US patent* 5604489 constitutes a further disclosure that such as display was well known to those of ordinary skill in the art at the time of invention in support of Examiner's previous taking of official notice.

**ABSTRACT:**

*An alphanumeric input terminal is provided which allows a user to enter a sequence of characters that is compared to a stored valid entry code to determine whether access should be granted. The terminal displays a random number which the user adjusts by a rotatable knob to obtain a desired character. The character is entered by pushing the knob. The entered character is no longer displayed and the terminal displays another random character which is similarly adjusted and entered. This prevents observation of the characters being entered since only one character is displayed at any one time. By initially displaying a random character for each entry position, the adjustment made by the user to reach the selected character is different every time. This prevents one from determining the selected character by observing the direction and extent that the user rotates the knob before entering the character.*

Pegg has recited a value or quantity called a dynamic variable which Applicant has implicitly argued, is not a random number. The Examiner disagrees with this implication in that Pegg(Column 1, lines 55-60) discloses that it is the unpredictability of this dynamic variable which lends a "more random" PIN.

Previously, the Examiner argued that in light of the usage of the dynamic variable in the context of the user defined formula of Pegg, it would have been obvious to one of ordinary skill in the art to display this random dynamic variable to a user, where any such display would inherently constitute a random display of digits at respective digit positions.

However, in light of further examination of the prior art, the Examiner has determined that Pegg does not offer a motivation to render its system of PIN protection as such and further teaches away from such a modification.

Pegg does not explicitly state how the user may come to understand the information contained in the random variable, however does suggest implicitly that a user may acquire through other means and memorize it rather than having it displayed to a user during the authentication process.

For example, Pegg (Column 5, lines 26-32) discloses that the user memorizes an access key along with one or more dynamic variables.

Pegg (Column 7, lines 16-24) further discloses that “One type of user may be more apt to remembering words while another user may more easily remember numbers. Consequently, a user may want to use a number as the dynamic variable such as the current DJIA or may prefer to use words from a daily newspaper...” For this reason, the Examiner has determined that Pegg appears to teach away from such modification where the dynamic variable would be displayed towards the user. Instead, Pegg appears to take advantage of the fact that different users are more apt towards memorizing different kinds of random values.

In light of this disclosure, the Examiner has determined that Pegg does not teach “a display unit configured to display random digits at the respective digit positions arranged on the display screen when a user logs in” nor does it appear to lend itself towards modification of this system in this respect. No further motivation has been found to combine such a limitation with Pegg. Accordingly the rejections are withdrawn and claim 1 and its dependent claims are held to be allowable.

Claim 28 recites subject matter that is substantially similar to independent claim 1 and is allowable for the same reason.

### *Conclusion*

3. Any inquiry concerning this communication from the examiner should be directed to Thomas M Ho whose telephone number is (571)272-3835. The examiner can normally be reached on M-F from 9:30 AM - 6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory A. Morse can be reached on (571)272-3838.

The Examiner may also be reached through email through [Thomas.Ho6@uspto.gov](mailto:Thomas.Ho6@uspto.gov)

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-2100.

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Customer Service Representative Telephone: 571-272-2100 Fax: 571-273-8300

TMH

December 23<sup>rd</sup>, 2005

David Y. Jung  
Primary Examiner

12/23/05

